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## NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

05/29/2009

Michelle B. Lando 157 Concord Road Billerica, MA 01821-7001 EXAMINER

WARTALOWICZ, PAUL A

ART UNIT PAPER NUMBER

1793

DATE MAILED: 05/29/2009

١	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
	10/720,582	11/24/2003	Yakov E. Kutsovsky	02019CON	5049

TITLE OF INVENTION: FUMED METAL OXIDE PARTICLES AND PROCESS FOR PRODUCING THE SAME

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	08/31/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

or Mail Stop 1850E FEE
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P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

Note: A certificate of mailing can only be used for domestic mailings of the CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 7590 05/29/2009 Certificate of Mailing or Transmission Michelle B. Lando I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below. 157 Concord Road Billerica, MA 01821-7001 (Depositor's name (Signature (Date APPLICATION NO. FILING DATE CONFIRMATION NO FIRST NAMED INVENTOR ATTORNEY DOCKET NO. 10/720 582 11/24/2003 Yakov E. Kutsovsky 02019CON 5049 TITLE OF INVENTION: FUMED METAL OXIDE PARTICLES AND PROCESS FOR PRODUCING THE SAME APPLN. TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1510 \$300 \$1810 08/31/2009 EXAMINER ART UNIT CLASS-SUBCLASS WARTALOWICZ, PAUL A 1793 423-337000 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. (2) the name of a single firm (having as a member a "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is Number is required. listed, no name will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) Please check the appropriate assignee category or categories (will not be printed on the patent): 🔲 Individual 🚨 Corporation or other private group entity 🚨 Government 4a. The following fee(s) are submitted: 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) lssue Fee A check is enclosed. Dublication Fee (No small entity discount permitted) Payment by credit card. Form PTO-2038 is attached. Advance Order - # of Copies \_ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form). 5. Change in Entity Status (from status indicated above) a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2). NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. Authorized Signature Date Typed or printed name Registration No. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



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UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.msplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/720,582	11/24/2003	Yakov E. Kutsovsky	02019CON	5049	
75	90 05/29/2009		EXAM	INER	
Michelle B. Land	0		WARTALOWICZ, PAUL A		
157 Concord Road			ART UNIT	PAPER NUMBER	
Billerica, MA 01821-7001			1793		
			DATE MAILED: 05/29/2009		

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 68 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 68 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)			
	10/720,582	KUTSOVSKY, YAKOV E.			
Notice of Allowability	Examiner	Art Unit			
	PAUL A. WARTALOWICZ	1793			
The MAILING DATE of this communication apperall claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to	plication. If not include will be mailed in due	ed course. <b>THIS</b>		
1. $\square$ This communication is responsive to <u>4/30/09</u> .					
2. The allowed claim(s) is/are <u>1-30</u> .					
Acknowledgment is made of a claim for foreign priority un     a) □ All b) □ Some* c) □ None of the:     1. □ Certified copies of the priority documents have	0 (7(7)				
2. Certified copies of the priority documents have	been received in Application No				
Copies of the certified copies of the priority doc	cuments have been received in this	 national stage applica	tion from the		
International Bureau (PCT Rule 17.2(a)).		•			
* Certified copies not received:					
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.					
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give			OTICE OF		
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.				
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached					
1) hereto or 2) to Paper No./Mail Date					
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date					
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).					
<ol> <li>DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.</li> </ol>					
Attachment(s)	E Notice of Informal D	otant Appliaction			
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftperson's Patent Drawing Review (PTO-948)</li> </ol>	<ol> <li>5. ☐ Notice of Informal P</li> <li>6. ☐ Interview Summary</li> </ol>	• •			
2. Involice of Draitperson's Patent Drawing Review (P10-946)	Paper No./Mail Dat				
Information Disclosure Statements (PTO/SB/08),     Paper No./Mail Date	7. Examiner's Amendr	nent/Comment			
4. Examiner's Comment Regarding Requirement for Deposit	8. 🛛 Examiner's Stateme	ent of Reasons for Allo	wance		
of Biological Material	9.				
	/Stanley Silverman/				
	Supervisory Patent Exa	aminer, Art Unit 179	3		
	1				

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Art Unit: 1793

## **DETAILED ACTION**

## Allowable Subject Matter

Claims 1-30 allowed.

The following is an examiner's statement of reasons for allowance:

The prior art of record does not teach or suggest providing a stream of liquid feedstock comprising a volatizable non-halogenated metal oxide precursor and injecting the stream of the liquid feedstock into a stream of combustion gas to atomize the liquid feedstock within the stream of combustion gas.

The prior art of record does not teach with necessary specificity fumed silica satisfying the equations specified in claim 25. In order to anticipate the claims, the claimed subject matter must be disclosed in the reference with "sufficient specificity to constitute an anticipation under the statute." What constitutes a "sufficient specificity" is fact dependent. MPEP 2131.02. In the instant case, it appears that atomizing the liquid feedstock post combustion of the combustion fuel is a feature that distinguishes over the prior art and is necessary to form fumed silica satisfying the equations specified in claim 25.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Art Unit: 1793

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to PAUL A. WARTALOWICZ whose telephone number is

(571)272-5957. The examiner can normally be reached on 8:30-6 M-Th and 8:30-5 on

Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Stanley Silverman can be reached on (571) 272-1358. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Paul Wartalowicz

May 11, 2009

/Stanley Silverman/

Supervisory Patent Examiner, AU 1793